ABSTRACT OF THE DISCLOSURE

An ATM (Asynchronous Transfer Mode) bridge device is 5 provided which is capable of removing unwanted ATM network traffic transmitted by a loop packet, of avoiding confusion of a layer 2 network caused by occurrence of erroneous learning, of rapidly identifying a point where a loop has been formed, and of preventing simultaneous formation of loops among a plurality of points caused 10 by loop setting in a plurality of interfaces. The ATM bridge device has functions of learning a MAC (Media Access Control) address of a packet transmitted from the ATM bridge device, of filtering and monitoring a MAC address of a packet input from an ATM network and judges, when receiving a packet output from the ATM bridge 15 device, the input packet as a loop-back packet to scrap the packet and to notify an upper network layer of the loop-back packet.